160862

CRA

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773) 380-9933 Fax: (773) 380-6421

August 29, 1997 Reference No. 6711

Ms. Mary Tierney
United States Environmental
Protection Agency
Region V - (SR-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Dear Ms. Tierney:

Re: Work Plan - Supplemental LNAPL Investigation - Lenz Oil

This letter presents a work plan to conduct a Supplemental LNAPL Investigation at Lenz Oil which follows the scope of work requested by USEPA and IEPA.

SCOPE OF WORK

- Install up to six piezometers at locations shown on the attached figure to delineate the extent of LNAPL. Installation protocols will follow ERM's procedures*. Piezometers will consist of flush mounted two inch diameter, stainless steel well screens and riser pipe (e.g. PZ 23 attached) installed with a hollow stem auger and water rotary (if necessary) drilling methods. The attached figure shows hydrograph for MW5S and MW6S. Table 1 presents proposed screen intervals. If any borehole shows evidence of LNAPL, the piezometer will be moved to the south or west in any effort to find the limit of LNAPL.

- Drill up to 10 shallow boreholes along existing petroleum pipelines to investigate whether any leakage has occurred. The boreholes will be drilled to bedrock (approximately 7 feet below ground surface).

- Conduct bail down tests at three piezometers per ERM's Field Sampling Plan*.

- Survey new piezometer/borehole locations.

- Conduct four rounds of water level and LNAPL measurements.

* Note: Lenz Oil Site, Field Sampling Plan, Addendum A, Revision 4, June 27, 1994

- Sample groundwater MW3S, MW6S and three piezometers located downgradient (south) of the LNAPL and analyze for volatile organic compounds (VOCs). This work is intended to evaluate the potential presence of a dissolved VOC plume downgradient of the LNAPL. VOC sampling will only be conducted at wells/piezometers without LNAPL.

ACCESS

Access is being arranged with Mr. Tameling who owns the property south of Jean's Road and Illinois Department of Transportation (IDOT). Amoco, West Shore and Badger have been notified and will mark the pipelines. Access is not required from the pipeline companies.

CUTTINGS/WATER MANAGEMENT

All drill cuttings and water will be contained in drums and will be stored in the drum storage area (including the drum of water from abandonment of the William's wells). The drill cuttings and water will be managed along with the final selected remedy.

REPORTING AND SCHEDULE

Drilling is scheduled to begin September 2, 1997 and will likely take 5 to 10 working days. After piezometer installation, the VOC sampling will be conducted and two rounds of water/LNAPL measurements will be taken.

A Feasibility Study (FS) Addendum will be prepared to incorporate the results of the Supplemental LNAPL Investigation. The FS Addendum will include updated cost estimates for FS alternatives taking into account changed field conditions. At this time we believe the FS Addendum Report can be prepared for submittal to USEPA within four weeks after VOC groundwater sampling.

August 29, 1997 Reference No. 6711

Should you have any questions, please do not hesitate to call.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Ron Frehner

RF/mo/2
Encl.

c.c.: Alan Bielawski, Sidley & Austin
John Griggs, ComED
Susan Smith, Owens Illinois
Jerry Willman, IEPA
Walt Pochron, CRA

TABLE 1

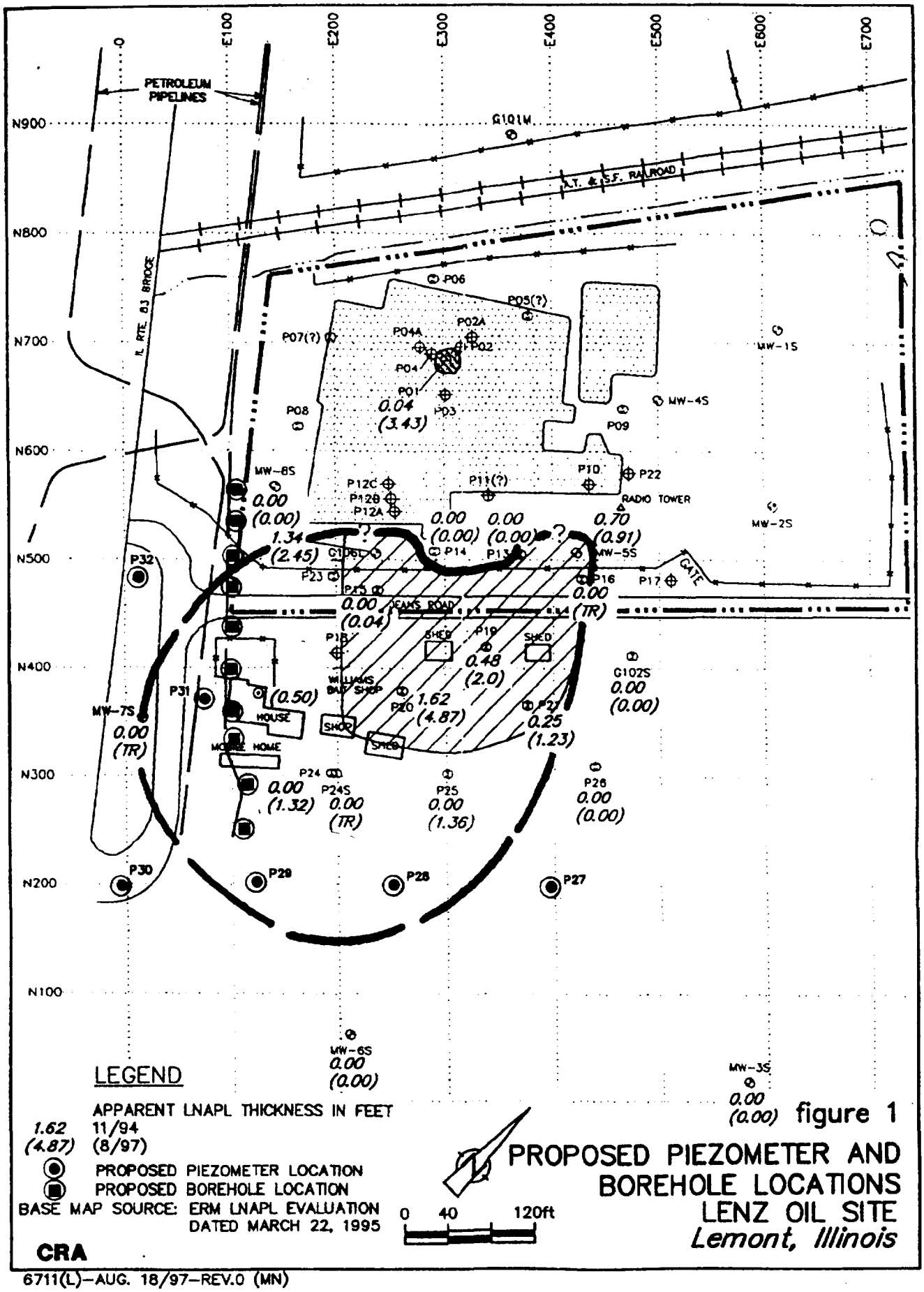
PROPOSED PIEZOMETER SCREEN INTERVALS

A. Background Information

Existing Piezometers	*Ground Elevation (ft AMSL)*	*Depth (ft BGS)*	*Range in Groundwater Elevation (ft AMSL) (1991 - 1997)*
PZ24	595.8	3.5 - 6.6	589.21 - 592.29
PZ25	595.7	3.1 - 6.4	589.27 - 592.61
PZ26	596	3.1 - 6.5	589.52 - 592.91
MW7S	608	14.9 - 19.0	589.05 - 593.11
MW6S	593.6	0.1 - 4.5	589.07 - 593.72
MW3S	594.9	1.6 - 6.7	588.16 - 593.30
MW5S	600.7	4.7 - 9.5	591.23 - 596.04

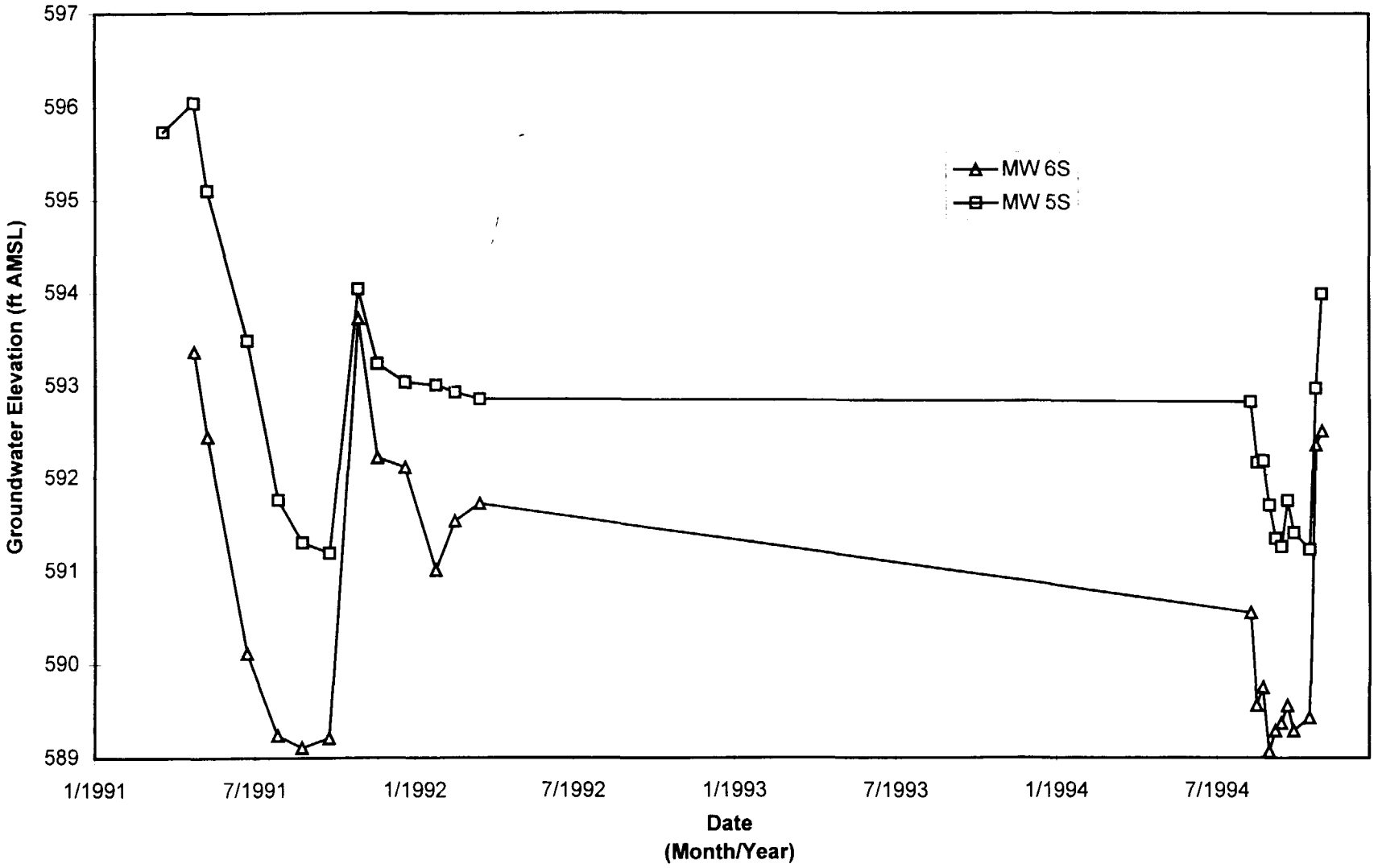
B. Proposed Screen Intervals

Piezometer	*Ground Elevation (ft AMSL)*	*Estimated Screen Depth (ft BGS)*	*Proposed Screen Interval (ft AMSL)*
PZ27	594	2' - 12'	580 - 592
PZ28	594	2' - 12'	580 - 592
PZ29	594	2' - 12'	580 - 592
PZ30	594	2' - 12'	580 - 592
PZ31	608	12' - 22'	586 - 596
PZ32	601	3' - 13'	588 - 598



6711(L)–AUG. 18/97–REV.0 (MN)

Figure 2
Hydrograph For Monitoring Wells MW-5S and MW-6S
Lenz Oil Site
Lemont, Illinois

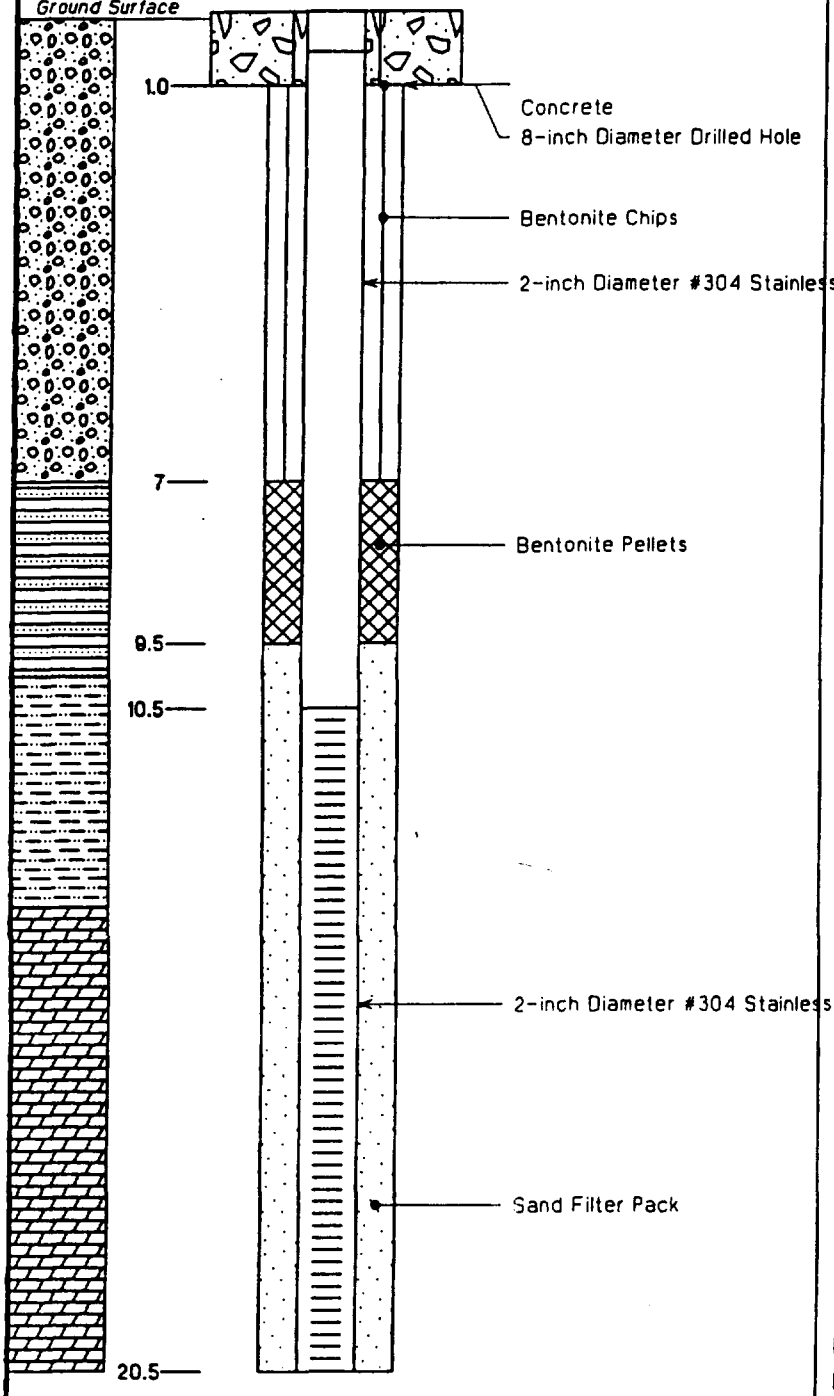


ERM-North Central, Inc.

Environmental Resources Management

WELL CONSTRUCTION LOG

PROJECT/TASK	PROJECT NUMBER	WELL NUMBER
LNAPL INVESTIGATION	94017EM	P-23



Associated Soil Boring P-23

City *Lemont*

County and State *DuPage, Illinois*

Ground Surface Elevation *601.186 AMSL*

Measuring Point Elevation *600.87*

☒ Surveyed ☐ Estimated

Installation Date (s) *8-12-94*

Drilling Method *4-1/4" I.D. HSA*

Drilling Contractor *Rock & Soil*

Drilling Fluid *None*

Development Technique (s) / Dates

Fluid Loss During Drilling (gals)

Water Removed During Development (gals)

Static Water Level Depth (feet)

Date Water Level Measured

Well Purpose *LNAPL Investigation*

Remarks

Prepared By *Daniel W. Petersen*

Location *ERM-North Central*

TABLE 1

PROPOSED PIEZOMETER SCREEN INTERVALS

A. Background Information

Existing Piezometers	*Ground Elevation (ft AMSL)*	*Depth (ft BGS)*	*Range in Groundwater Elevation (ft AMSL) (1991 - 1997)*
PZ24	595.8	3.5 - 6.6	589.21 - 592.29
PZ25	595.7	3.1 - 6.4	589.27 - 592.61
PZ26	596	3.1 - 6.5	589.52 - 592.91
MW7S	608	14.9 - 19.0	589.05 - 593.11
MW6S	593.6	0.1 - 4.5	589.07 - 593.72
MW3S	594.9	1.6 - 6.7	588.16 - 593.30
MW5S	600.7	4.7 - 9.5	591.23 - 596.04

B. Proposed Screen Intervals

Piezometer	*Ground Elevation (ft AMSL)*	*Estimated Screen Depth (ft BGS)*	*Proposed Screen Interval (ft AMSL)*
PZ27	594	2' - 12'	580 - 592
PZ28	594	2' - 12'	580 - 592
PZ29	594	2' - 12'	580 - 592
PZ30	594	2' - 12'	580 - 592
PZ31	608	12' - 22'	586 - 596
PZ32	601	3' - 13'	588 - 598